

Notice of Allowability

Application No.

10/079,294

Examiner

Prieto Beatriz

Applicant(s)

PARADY, BODO K.

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/12/04.
2. ☒ The allowed claim(s) is/are 33-51.
3. ☒ The drawings filed on 20 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 9/25/04
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Beatriz Prieto
Patent Examiner
9/25/04

Examiner's Amendment

1. An Examiner's Amendment to the record appears below. Should the changes or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.

2. Pursuant to M.P.E.P. §606.01, this title has respectfully been changed to read as follows:

**-- ELECTRO-OPTICALLY CONNECTED MULTIPROCESSOR
CONFIGURATION INCLUDING A RING STRUCTURED SHIFT-REGISTER --**

3. Pursuant to M.P.E.P. §201, this examiner amendment solely updates application's reference(s) to earlier application information.

IN THE SPECIFICATION:

Please substitute the following paragraph on page 1, line 1:

This application is a continuation of U.S. Patent Application Serial No. 09/553,600 filed April 20, 2000, now Patent No. 6,385,657 issued on May 7, 2002, which is a continuation of U.S. Application Serial No. 08/883,862, filed June 27, 1997, now Patent No. 6,115,756 issued on September 05, 2000 (and includes a continued prosecution application filed September 24, 1999).

4. Authorization for this examiner's amendment was given via e-mail (see attached) with Lawrence J. Merkel (Reg. No. 41,191) on September 28, 2004 to place abstract in compliance with 37 CFR 1.72 in accordance with MPEP 608.01(b).

Please substitute the following paragraph on page 59, line 1:

ABSTRACT OF THE DISCLOSURE

A computer system comprises a plurality of modules and a shift register having a plurality of slots connected in series, wherein each of the plurality of slots is coupled to one of the plurality of modules. In one embodiment, an output of a last slot of the plurality of slots is coupled to an input of an initial slot of the plurality of slots to form a ring. Each slot of the shift register corresponds to a time slot on the ring, and each of the time slots is assigned to one of the modules. At least two of the modules are configured to independently generate frames for transmission on the ring. In another embodiment, at least one of the modules comprises a bridge module coupled to communicate with other bridge modules separate from the plurality of modules.

Reason for allowance

5. The following is the Examiner's statement of Reason for Allowance. This statement is not intended to necessarily state all the reasons for allowance or all the details why claims are allowed, nor it specifically or impliedly state that all the reasons for allowance are set forth. The primary, or important reason for allowance of the claims is the inclusion of the limitation(s) in all the claims which is not found in the prior art references. In this case, the prior art of record teaches the claimed invention substantially as claimed, including a shift-register comprising slots, i.e. time-slots connected in series, wherein an output stage is coupled to an input stage forming a ring, however fails to teach or suggest individually or in combination; where each of the time slots are assigned to a module configured to generate frames for transmission on the ring formed by the shift-register and wherein each frame includes communication between two of the plurality of modules, as set forth on independent claims 33 and 45 and as described in detail by specification on pages 41-42 and Figure 12, and as argued on remarks filed 07/12/04 on pages 7-8. Further, the prior art fails to teach or suggest individually or in combination: a shift registers having slots connected in series each of the slots coupled to a bridge coupled to communicate with other bridge modules, as set forth on independent claim 34. Claims are allowed because of the combination with other limitations and the limitation listed above.

6. Claims **33-51** are allowed because of the combinations of other limitations and the limitation listed above.

7. Regarding applicant's remarks on page 6 of amendment filed 07/12/04, the reference applied on office action mailed 05/14/04, *MAEDA* et. al. is U.S. Patent No. 4,967,350 and has hereby made of record via a PTO-892 attached.

8. Double patent analysis has been performed with respect to issued patents having common relationship of inventorship and/or ownership with respect to the above-allowed claims, none are found to warrant a double patenting rejection.

9. Any comments Applicants considers necessary must be submitted no later than the payment of the Issue Fee and to avoid processing delays, should preferable accompany the Issue Fees. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance". In event of any post-allowance papers (e.g. IDS, 312 amendment, petition, etc.), Applicant is exhorted to mail papers to the Production Control branch in Publications or faxed to post-allowance papers correspondence branch at (703) 308-5864 to expedite issuing process or call PUB's Customer Service if any questions at (703) 305-8497.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to B. Prieto whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:30 to 4:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Jack B. Harvey can be reached on (703) 305-9705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see <http://pair-direct.uspto.gov> or the Electronic Business Center at 866-217-9197 (toll-free)).

Any response to this action should be mailed to:

Box Issue Fee
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 746-4000 (Issue Fee and any Publication fee/payments)

or:

(703) 305-8283 (for checking on receipt of payment w/Publication)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Fourth Floor (Receptionist), further ensuring that a receipt is provided stamped "Technology Center 2100".



B. Prieto
Patent Examiner
September 28, 2004